Missouri Botanical Garden

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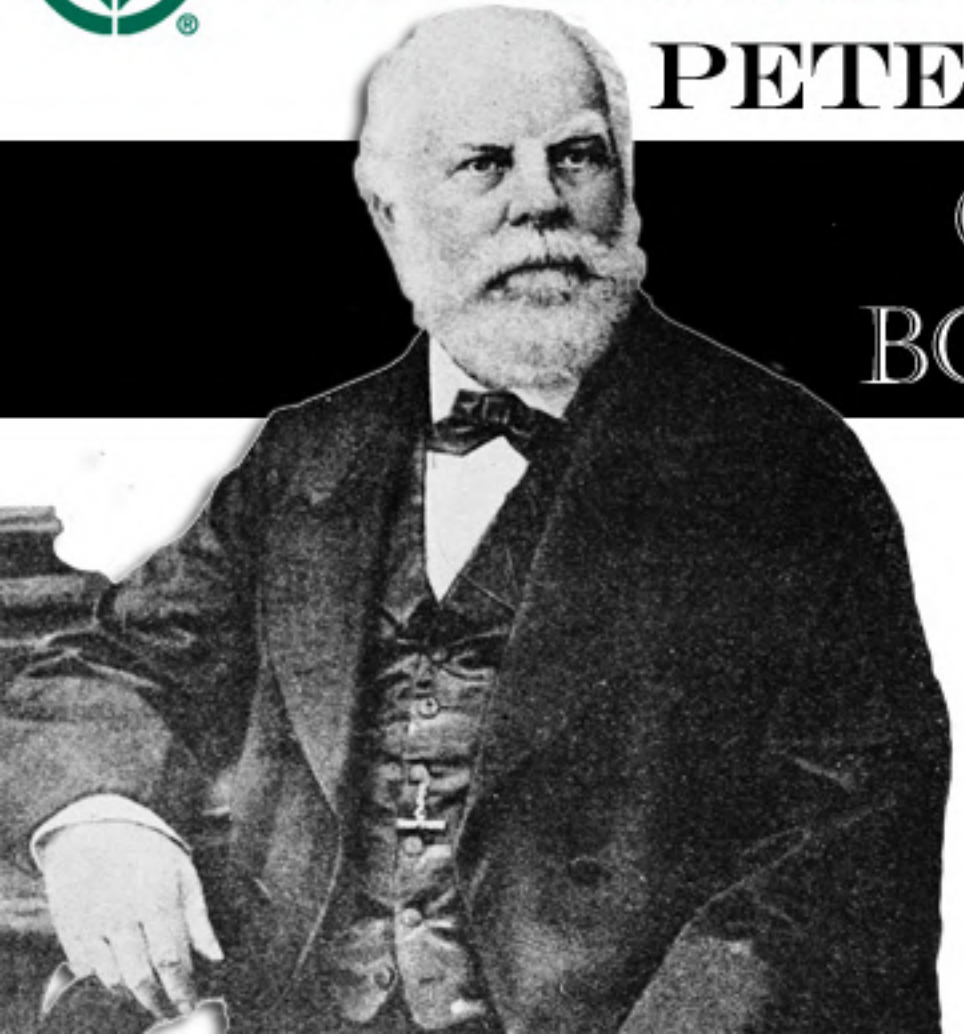
George Engelmann Botanical Notebooks

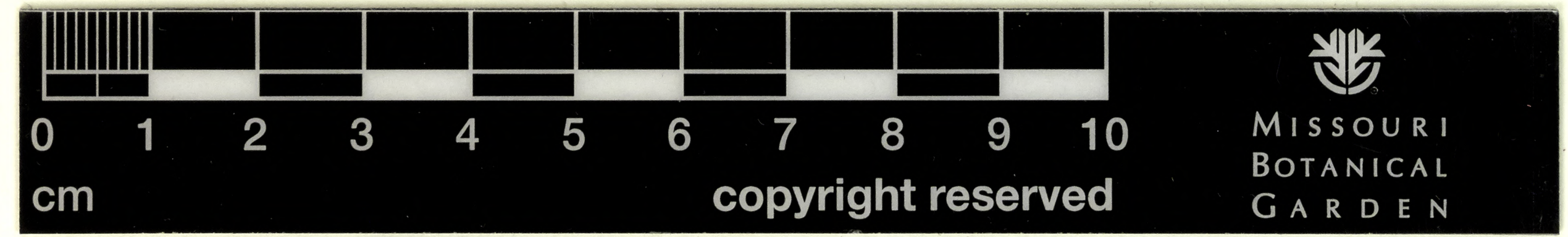


Pagination Note:
Since many of the items lack a specific page number, the page number displayed online refers to the sequentially created number each item was given upon cataloging the materials.

St George Utah May 6th 1874

Cereus engelmanni just coming in

the Opuntia nitida both splendid!



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1917-9

Raphidocystis

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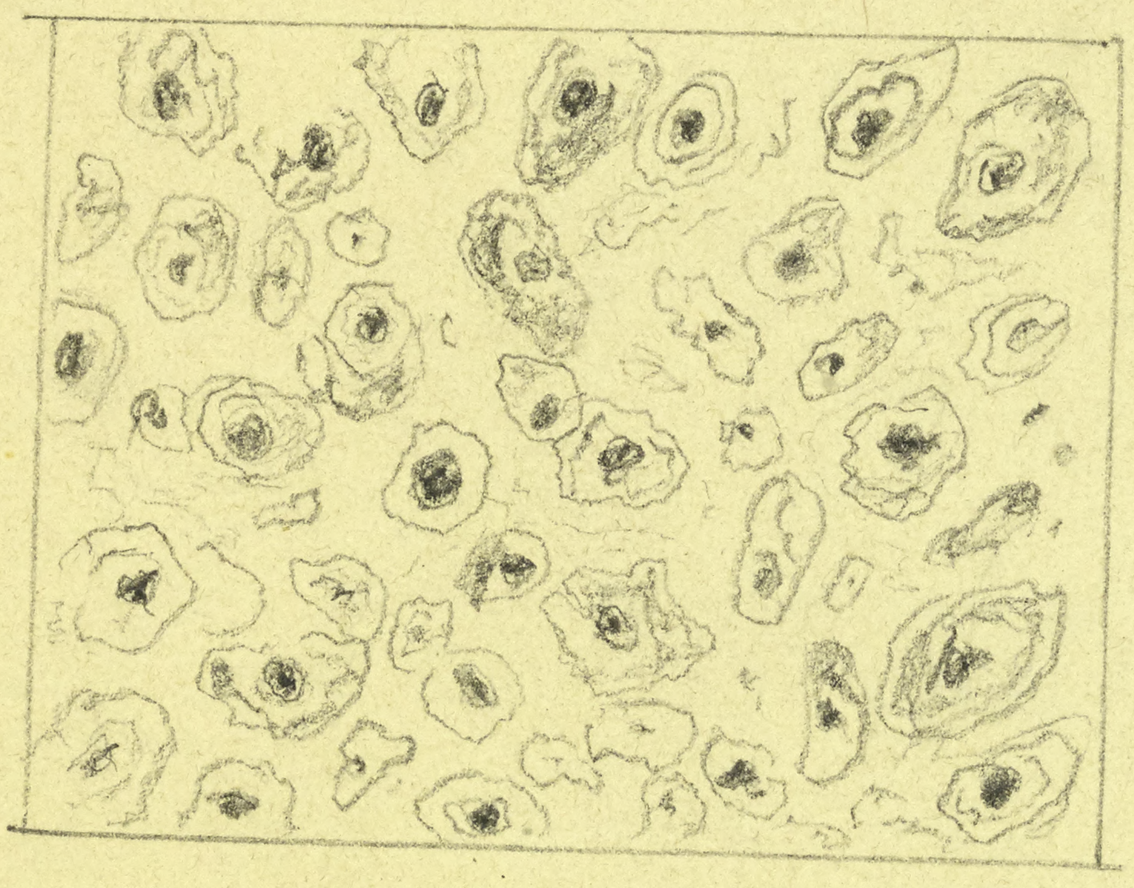

Raphides of Cuticle of Cactus manillensis
hexangularis

(Cam.a Lucida 60 diam.r.)

D.r Holmes 1852?

R.S.H.

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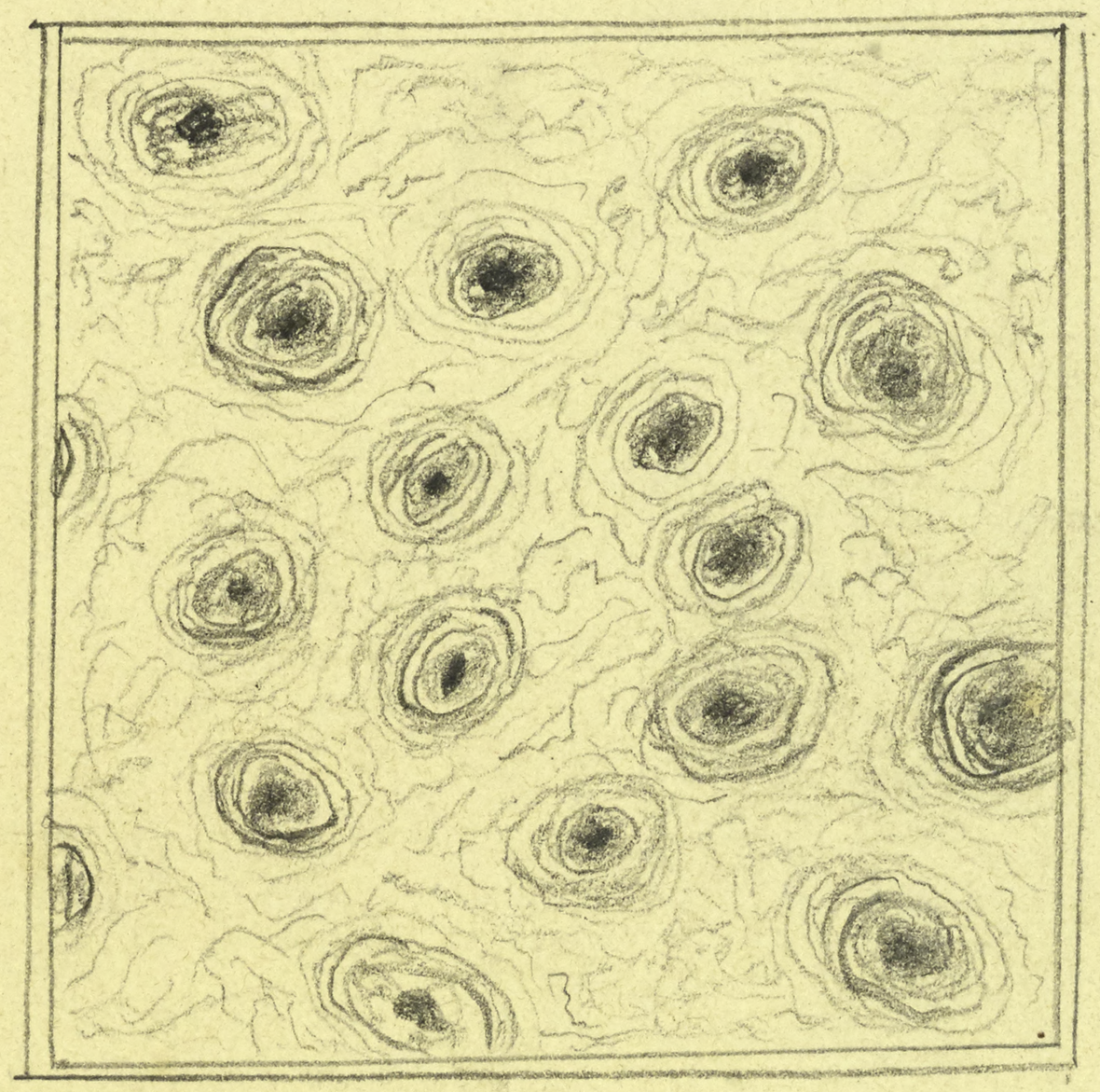

Raphides of Cuticle of Cactus

(Camera Lucida 60 diam.r)

Dr Holmes 1852 ?

R.S.H.

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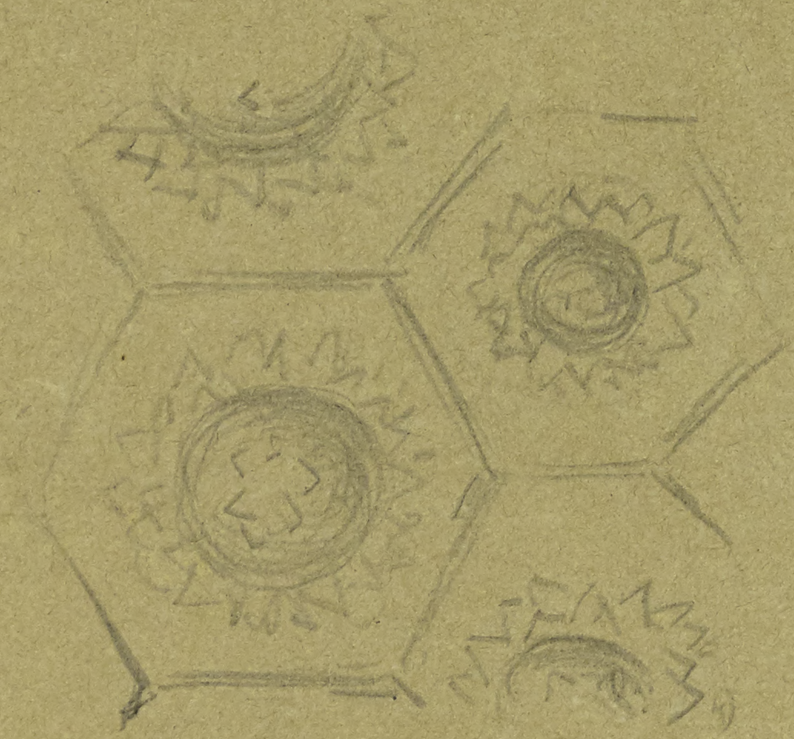

Conglomerate Rhaphides
in the Cuticle of a Cactus

from pag 43
Lectures on Histology
delivered at
by John Quekett
London 1852.

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E. C. Angelrodt.
Dr. Geo. Engelmann
Geo. Busch.
Hermann Achenbach.
Philipp Ewald.

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A Monstrosity of Mam. polyedra

Nov. 1857 in hort. Bot Monac.

The original vertex of the plant is pushed aside (not visible in the figure) and a second one makes its appearance, a division of the axis or more probably a branch, breaking through the tissue. The new top or vertex consists of scales, though fleshy, mamillae which form a sort of a button with some tendency at the connate or agglutinated tips — around it are found many more or less irregular mamillae, some of which are figured above; some show foliaceous tips (b) near or distant (c) from the arcole; one (a) looks like the mamilla

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of a a Anhalonium; while others (?) have no areola or spines at all, but dwindle down into green lanceolate rather small scales or leaves (the figures are magnified.) with a membranaceous whitish or grey tip like a flexuous arista. —

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Nov. 1873

Genera of Cactaceae

are not well defined, except Opuntia and Rhipsalis; ~~Melocactus~~ where the chasm of fl. & fr. unite with the vegetative characters

Melocactus, strongly marked by vegetative characters, is it self a character closely allied with Mamillaria, but finds an analogon among Cerei in R. Lorentzii, (~~which by some~~ which on account of numerous intermediate forms can not be separated from Cereus)

Therefore I divide the Act. in 3 ~~Sections~~ or tribes

1. Aphyllae (Cactus)
2. Foliolosae (Opuntia)
3. Foliatae (Rhipsalis)

} only these 3 genera! March 1876

They might just as well constitute 3 genera, if the vast number of the first section (Cactus) and the great differences of forms (though united by gradual transitions) did not make it desirable to separate them still further; and

The embryology proves that the more dissolute forms are the simpler ones corresponding with the first stage of growth of the young plant; (& Cuscuta!) the compact forms must be taken for the more perfect, more elaborate forms. Many Echinocacti and many Cerei, when young, resemble Mamillaria; the flat Opuntiae must for the same reason be more perfect, more elaborate than the cylindric ones. — The cylindric species of Rhipsalis are at first quite angled, and terete only in older

Genera of Aphyllae: Melocactus, Mamillaria, Echinocactus, Cereus, Epiphyllum, Rhipsalis —

But as remarked above the characters to distinguish them are often artificial, and transition forms are abundant especially between Mamillaria & Echinocactus, and these genera & Cereus, Melocactus and Rhipsalis form the extremes and are more isolated; no transitions are known to me. (Pfeiffera is only apparently one)

Subdivision & Phyllophora belong to Mamillaria
Disacanthus & Lemaireocereus to Echinocactus Hylocereus flores rodueni!
Cereus has been more divided than any other genus; of

Cactaceae shape of plat, shape of flower, coating of ovary, insertion of stamens has been made use of, but it is found that these different characters do not go together, they supporting one another, so that it is even difficult to fix the subgenera or sections.

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